**Circular**

C1396  
*Forest Trees of Illinois*, 340p  
$10.00

Since 1927 Forest Trees of Illinois has been the definite introductory field guide for native and introduced trees of the Prairie State. The 10th edition is updated and revised with new illustrations and new information, including the addition of two native tree species. The book provides a comprehensive overview of almost 150 native and introduced tree species that are found in Illinois. Species are presented by common and scientific name. Descriptions include detailed information on growth form, bark, leaves, twigs, flowers, fruit, wood uses, habitat, range, and distinguishing features. Each description is illustrated with a photo of the bark, drawings of leaves, twigs, and fruit and an Illinois range map.

**Transparencies**

T780  
*Forest Tree Identification*, 92 fr.  
Price: $70.00

Over 90 native forest species are illustrated with leaf, flower and/or fruit, and leaf arrangement characteristics. An enlarged twig illustration shows terminal buds and leaf scars in sufficient detail to teach identification features.

**CD-ROMS**

CD1008  
*Introduction to Arboriculture Series*  
Price: $77.00

These interactive CD-ROMs were developed as an educational resource for arborists. In the horticulture or forestry classroom, they will have the same benefits.

1. Instructional strategies that simulate job tasks
2. A high level of interactivity
3. Self-paced instruction (can accommodate multiple users)
4. Emphasis on visuals, including video and other graphics
5. Digital audio that enhances text
   - A system of instant feedback that engages the learner
6. Quiz questions
7. Glossary of key terms with definitions and pronunciations

CD1008 Pruning contains lessons on how to prune trees for tree health and human safety. Lesson one introduces the principles of pruning. Lesson two covers practices and strategies.
CD1009
**Introduction to Arboriculture: Tree Identification and Selection**
Price: $77.00

Tree Identification and Selection has these objectives:
1. Understand how all plants are classified and how scientific names are based on the classification system.
2. Explain what scientific names are, why they are used, and how they are written.
3. Explain how plant characteristics, such as growth habit, texture, and color, can be used in tree identification.
4. Describe how leaf arrangement is used to help identify trees.
5. Become familiar with the various leaf shapes and types of leaf margins, bases, and apices.
6. Learn to use bud and twig characteristics to identify trees without leaves.

CD1010
**Diagnosis and Disorders**
Price: $77.00

Objectives:
1. Understand the principles of a systematic approach to the plant diagnostic process.
2. Explain how stress can weaken a tree, predisposing it to secondary problems.
3. Learn to recognize the signs and symptoms of tree disorders.

There are three lessons on this CD. Lesson one is on general diagnosis. Lesson two is on abiotic disorders. Lesson three is on biotic disorders.

CD1011
**Planting and Early Care**
Price: $77.00

Objectives:

- **Planting**
  1. Learn the techniques and procedures used to plant trees.
  2. Understand how using proper techniques can improve survival and accelerate establishment.
  3. Be familiar with the various types of nursery stock.
  4. Understand that each stock has its advantages, limitations, and proper planting techniques.

- **Early Care**
  1. Understand the special requirements of newly transplanted trees and become familiar with early-care procedures.
  2. Understand the nutrient requirements of newly planted trees and learn which types of fertilizers are acceptable and which could be potentially detrimental to an establishing tree.
  3. Understand the benefits associated with proper mulching techniques.
  4. Learn the techniques used for, as well as the advantages and disadvantages of, staking or guying newly planted trees.
  5. Learn how to prune a newly planted tree and how to train a young tree to develop a strong branch structure.
  6. Become familiar with which information should be included when writing or accepting written planting specifications.

CD1012
**Tree Maintenance**
Price: $77.00

This CD contains three major sections: tree support systems, fertilization, and lightning protection systems.

- **Tree Support Systems**
  1. Determine when a tree might be helped by the installation of cables, guys, or bracing rods.
  2. Discuss the limitations of cabling and bracing systems.
3. Explain the different ways trees can be cabled, braced, or guyed.
4. Illustrate the techniques and materials used for cabling and bracing.
5. Recognize the fact that trees that have been cabled, braced, or guyed should be inspected periodically to ensure proper functioning of the tree support system.

Fertilization
1. Become familiar with the essential elements that trees require and how these elements are absorbed.
2. Understand the rationale for fertilizing urban trees.
3. Explain the advantages and disadvantages of some fertilizers.
4. Describe the different methods of fertilizer application and the advantages and disadvantages of each.
5. Discuss the problems that can be associated with excessive fertilization and leaching
6. Explain why determining nutritional requirements and availability is the first step prior to developing fertilization recommendations.

Lightning Protection Systems
1. Discuss the basic principles of lightning-strike physics.
2. Present the circumstances under which a lightning protection system may be recommended for trees.
3. Discuss the probability of lightning damage to trees based on their size, species, and location.
4. Describe the design of a basic lightning protection system and some of the installation procedures.
5. Understand the limitations of tree lightning protection systems.

System requirements for CD1008, CD1009, CD1010, CD1011, and CD1012: Windows 2000 or XP; Pentium III or better; 24X CD-ROM or better; sound

**Grain Production**

**Units**

**AU8011**
*Crop Breeding: Corn*, 28p
Price: $3.75

Describes the importance of the corn crop, its breeding history, taxonomic relationships, crop characteristics, and breeding objectives. It includes a glossary and shows the steps in making a controlled cross for the crop.

**U4027b**
*Growing Wheat*, 28p
Price: $3.75

**U4039b**
*Corn Production*, 20p
Price: $2.75

**U4055a**
*Growing Grain Sorghum*, 20p
Price: $2.75
Pesticides

Units

Safe Use of Farm Chemicals Series
Safety in the use, storage, and application of agricultural chemicals is a common goal of agriculturists and the general public.

U4080 Pesticide Use: A Benefit/Risk Analysis, 20p
Price: $2.75

U4081 Reading Chemical Container Labels, 16p
Price: $2.25

U4082 Using Farm Chemicals Safely, 24p
Price: $3.25

U4083 Managing the Environmental Impact of Pesticides, 24p
Price: $3.25

U4084 Pesticide Application: Equipment & Calibration, 28p
Price: $3.75

U4085 Glossary of Pesticide Terms, 8p (bundle of 10)
Price: $10.00

Transparencies

T790 Safe Use of Pesticides, 40 fr., w/guide
Price: $35.00

Pesticide types, formulations, classification, labels, and warnings are described in detail. Protective clothing and equipment and safe practices are illustrated.

Soils

Units

AU8040 Managing Soil pH: Agronomic Crops, 24p
Price: $3.25

Various sections of this publication discuss soil pH adjustment and include pH and limestone problems to be solved. Activities are comparing pH testing technologies, measuring the pH of the water, and a classroom study of the effect of limestone on field soil.
Agronomy

U4001a
Collecting and Preparing Soil Samples for Testing, 16p
Price: $2.25

U4002a
pH Test for Soil Acidity, 8p (bundle of 10)
Price: $10.00

U4003c
Phosphorus Management, 16p
Price: $2.25

U4004b
Determining Available Potassium in Soils, 12p
Price: $2.00

U4006a
Soil Liming—A Key to Better Farming, 8p (bundle of 10)
Price: $10.00

U4008b
Potassium Management, 12p
Price: $1.75

U4009b
Planning the Nitrogen Program, 16p
Price: $2.00

U4010a
Planning a Fertilizer Program, 8p, (bundle of 10)
$10.00

U4011b
Hunger Signs in Crops, (with color insert), 12p
Price: $2.00

U4052b
Understanding Soils, 24p
Price: $6.50

U4052b-pk
Understanding Soils, bundle of 10
$60.00

The revised edition of this unit is updated with new information and color throughout, as well as a new section on urban soils. Topics include soil basics; how soils were formed; inherent characteristics of soils; associated land features; other soil components; and urban soils. This is an excellent unit for an introductory course on soils in Illinois. Use this publication to help your students understand soils and how to evaluate them. Sold individually or in bundles of 10.
Agronomy

U4053b
Soil Judging in Illinois. Using the Illinois Land-Use Scorecard
$5.50

U4053bbl
$45.00

This newly revised unit features an updated Illinois land-use scorecard, and it includes detailed descriptions of each section of the scorecard. The unit describes landscape characteristics, soil profiles, associated soil features, and soil use and management. Sold individually or in bundles of 10.

Transparencies

T701
Soil Science, 32 fr.
Price: $25.00

Introduces the science of classifying and managing soils. Graphically illustrates soil particle size, textural classes, and common types of soil structure.

T702
Soil Testing and Fertility, 57 fr, w/guide
Price: $50.00

Shows equipment, procedures, and test results of soil testing. Explains how nutrients are held in soils and how soil environmental conditions affect added nutrients. Charts point out the benefits of nutrient application.

Soybeans

Unit

U4033b
Soybean Production, 20p
Price: $2.75

Weeds

Units

U4073
The Weed Factor, 8p (bundle of 10)
Price: $10.00

Discusses how weeds and their seeds impact agriculture. Lists primary noxious, secondary noxious, and common weeds that are likely to occur in corn, soybeans, wheat, and oats in Illinois.
Agronomy

Transparencies

T700
How Herbicides Work, 46 fr.
Price: $40.00

Shows how weeds reduce crop yields and why good control is important. Illustrates life cycles of annuals, biennials, and perennials. Describes herbicides and how they work. Briefly reviews application equipment and its use.

CD-ROMS

MDS707b
Weed Identification, In all, there are nearly 700 frames on this CD.
Price: $85.00

This is a PowerPoint CD-ROM for teaching weed identification. It includes all the weeds on the IAVAT weed identification list (2007 revision). Presentations include 1) the regular set with images and text descriptions of the weeds, 2) a practice set without weed names appearing by the images, and 3) a set that is an interactive quiz presentation which allows the user to choose an image to answer a question.

MDS707b-10
Weed Identification Quiz Pack, (10 identical CD-ROMs for drill and practice)
Price: $250.00

Miscellaneous

Z7003a
Crop Seed Samples
Price: $45.00

This identification set contains 41 crop seeds used in the Illinois Agronomy Career Development Event. Includes a key to the numbered samples.

Alfalfa
Alfise clover
Barley
Birdsfoot trefoil
Broccoli
Brome grass
Canola
Corn
Cotton
Cucumber
Fescue
Grain sorghum
Kentucky bluegrass
Ladino clover
Lespedeza
Lettuce
Lima bean
Muskmelon
Oats
Orchardgrass
Pea
Peanut
Perennial ryegrass
Popcorn
Pumpkin
Red clover
Redtop
Rye
Safflower
Soybeans
Sudangrass
Sugar beet
Sunflower
Sweet clover
Sweet corn
Timothy
Tomato
Vetch
Watermelon
Wheat
**Agronomy**

**Z7004a**  
**Weed Seed Samples**  
**Price:** $120.00

This identification set includes 42 weeds listed in the Illinois Association of Vocational Agriculture Teachers (IAVAT) Agronomy Career Development Event rules.

- Barnyardgrass
- Buckhorn plantain
- Burdock
- Chicory
- Common cocklebur
- Common lambsquarters
- Common mallow
- Common milkweed
- Common mulein
- Common ragweed
- Curly dock
- Dandelion
- Fall panicum
- Field bindweed
- Field pennycress
- Giant foxtail
- Giant ragweed
- Green foxtail
- Horseweed (marestail)
- Ivyleaf morning glory
- Jimsonweed
- Johnsongrass
- Ladysthumb smartweed
- Large crabgrass
- Musk thistle
- Peppergrass
- Prickly sida
- Purslane
- Redroot pigweed
- Shattercane
- Shepherd’s-purse
- Velvetleaf
- Waterhemp
- Wild carrot
- Wild mustard
- Wild oats
- Wild parsnip
- Wild sunflower
- Woolly cupgrass
- Yellow foxtail
- Yellow nutsedge nutlets

**Units**

**Integrated Pest Management Series**  
IPM I, Ecology, Crops, and Pests introduces students to management techniques to keep insect and other pest populations at acceptable levels without harm to the environment. IPM II, Why IPM? demonstrates that indiscriminate pesticide use leads to serious problems.

- AU8004  
  **Integrated Pest Management I, Ecology, Crops, Pests,** 36p  
  **Price:** $4.50

- AU8005  
  **Integrated Pest Management II, Why IPM?**  
  **Price:** $4.50

- U4071  
  **Nontraditional Crops,** 28p  
  **Price:** $3.75

  Describes several nontraditional crops, including kenaf, guayule, rapeseed, crambe, castor, lesquerella, milkweed, and others. An introductory section lists factors to consider when evaluating nontraditional crops.

- U4074  
  **Precision Agriculture,** 28p  
  **Price:** $5.25

- **SETU4074 (bundle of 10)**  
  **Price:** $42.50

  This unit provides a basic outline of precision agriculture and its components. The major sections of the publication are Introduction, Soil Sampling, Remote Sensing, Global Positioning Systems, Yield Monitors, Geographic Information Systems, Variable Rate Technology, and The Future. Color illustrations appear throughout the unit, and a companion Web site of precision agriculture Web links has been prepared.
**Agronomy**

U4086

*Introduction to Plant Biotechnology*, 28p

Price: $3.75

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**Transparencies**

T730

*Practical Agronomy*, 40 fr.

Price: $35.00

Provides general illustrations and reference tables for agronomy. Can be used to supplement lectures and talks or for projection during student lab exercises. Major categories are Breeding, Growth and Development, Soils and Nutrition, and Miscellaneous.

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**Agronomy Diseases and Pests Picture Sheets**

Price per Bundle: $16.50 (Titles sold only in bundles of 25)

- X798.03  *Grain Molds and Vertebrate Storage Pests*
- X798.30  *Corn Insects–Above Ground*
- X798.31  *Corn Insects–Below Ground*
- X798.40  *Soybean Insects*
- X799.35  *Sorghum Diseases I*
- X799.36  *Sorghum Diseases II*
- X799.60  *Clover Diseases I*
- X799.61  *Clover Diseases II*
- X799.62  *Forage Grass Diseases I*
- X799.80  *Oat Diseases*
- X899.07  *Soybean Herbicide Injury II*
- X899.16  *Injury Symptoms from Selected Herbicides*
- X899.18  *Herbicide Injury–Meristematic Inhibitors II*

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X780

**Tree Identification Chart**

$3.50

This double-sided chart is designed to use sequential steps to identify trees from leaves and buds. It includes both broadleaved and coniferous trees commonly found in forests during summer months. Used along with Forest Trees of Illinois, the chart is perfect for training a forestry judging team. The Tree Identification Chart is a tri-fold product printed on waterproof and tear-resistant paper for long life and usability.
Diseases and Pests Binder
A 3-ring binder containing all 74 color photo sheets is organized with 25 tab dividers. Major divisions of the binder include diseases, herbicide injury, pests, and weeds of agronomic and horticultural crops.

MX800
3-ring binder with 25 tab dividers and 74 color photo sheets
Price: $45.00

X800
3-ring binder with 25 tab dividers
Price: $15.00

X830
Diseases of Soybeans and Corn, Pocketbook
Price: $6.50
This 3” x 5 1/2” booklet (spiral-bound) is a guide to help identify diseases of soybeans and corn quickly and accurately. It assists in early, in-the-field identification when control measures are generally more effective. Over 50 different diseases are illustrated with color photos.

X840a
Vegetative Identification of Common Row Crop Weeds, Pocketbook
Price: $11.00
This spiral-bound pocketbook has been revised and expanded. Describes 48 weeds.

Z840.1
Broadleaf and Grass and Grasslike Weed Vegetative Identification Keys, Two keys, 8p
Price: (bundle of 25) $41.00
These keys describe 27 broadleaf and 20 grass or grasslike weed seedlings found in corn and soybeans. They focus primarily on characteristics of leaf arrangements, true leaves, grass ligules, and cotyledons. Sketches are used to determine proper identification.
X855  
**Waterhemp Management in Agronomic Crops**, 12p Color Booklet  
Price: $3.00  
In 12 pages, this color booklet describes the biology and identification of waterhemp, considers its increased prevalence, and details interactions with soil-applied and postemergence herbicides in corn and soybean fields. Contains color photographs.

X860  
**Crop Plants**, 82p Book  
Price: $15.50  
Each 8 1/2” x 11” booklet has 40 sheets with clear color photographs that help identify plants quickly and accurately. Each crop plant is shown in 4 stages—seed, seedling, mature plant, and flower.

**Field Crop Scouting Manual**, Sixth edition, 240p  
X880e, manual only  
Price: $75.00  

CDR880e, CD-ROM only  
Price: $75.00  

SETX880e, manual + CD-ROM  
Price: $140.00  
This manual is designed to aid in identification and evaluation of common problems in the field. It describes nutrient deficiencies, herbicide injuries, insects, diseases, weeds, and other agronomic crop problems. Filled with color photos, line drawings, and scouting worksheets and guidelines. Revised 2010.

The CD-ROM recreates the printed manual as Adobe Acrobat documents for onscreen viewing, with the added benefit of easy navigation. All the content is fully indexed and searchable by keywords. The freely distributable Adobe Acrobat Reader is included on the CD-ROM.
**Agronomy**

**X900**, manual only  
**Crop Sciences Laboratory Manual**, 234p  
Price: $60.50

**CDR900**, CD-ROM only  
Price: $30.25

Written by Patricia Stoller, Department of Crop Sciences, University of Illinois at Urbana-Champaign, this manual is a good reference for the agriculture classroom. High school agriculture instructors may find the manual useful for supplementing their class laboratory activities. College and University classes can use it as a class text.

There are color illustrations and color photographs throughout the manual. Each of the 14 chapters has a notes-taking section at the end of the chapter, and there is a multipage laboratory exercise for each chapter.

An instructor guide CD-ROM consists of a 46-page Adobe Acrobat document. The guide contains suggestions to help the instructor coordinate lab activities. These suggestions include a list of potential plants and other materials that can be used for exercises. Lab preparations are outlined and sample answers to lab exercise questions are presented. Bookmark navigation is provided to the 14 chapter exercises. A freely distributable Adobe Reader is included on the CD-ROM.

**Growth Stages of Agronomic Crops**, 68p  
Price: $19.00

Learn how to identify the growth stages of common crops in the Midwest. This publication is intended to assist anyone who needs to scout fields for problems such as weeds, diseases, and insect pests that may interfere with crop growth and yields.

The publication covers alfalfa, corn, soybean, sorghum, and small grains (barley, oats, rye, and wheat) with detailed illustrations of every stage of crop growth. Features more than 200 original color photos and illustrations, labeled with plant parts and characteristics. Includes a comprehensive glossary of terms used throughout the publication.

**Pocket Magnifier**  
Price: $40.50

Soybean rust lesions are small and good magnification is required for proper examination. This high-quality, 20X folding pocket magnifier with lanyard and carry case is recommended by scouting experts as an essential part of your scouting tools.
MDS708
**Agronomy Insect Identification CD-ROM**
Price: $35.00

If you’re looking for the right tool to teach your students about insects, this CD-ROM has it all. Insect Identification includes all the insects on the Illinois Association of Vocational Agriculture Teachers Agronomy Career Development Event insect identification list (the Illinois list is a subset of the national Agronomy CDE list of 38 insects). Presentations include:

- a set with images and text descriptions of the insects
- a practice set without insect names by the images
- a set that is an interactive quiz presentation, which allows the user to choose an image to answer a question.

The CD-ROM also includes a short presentation on insect anatomy, insect life cycles, and economic injury. Teachers will like the Quiz Planner for creating multiple quizzes for classroom use.

In all, there are more than 150 PowerPoint frames on this CD.

MDS709
**Agronomic Crop Identification**
Price: $80.00

This resource is designed to help the user learn to identify crop plants. The CD contains more than 650 PowerPoint frames featuring over 50 crops. It includes all of the crops on both the IAVAT (Illinois Association of Vocational Agriculture Teachers) list and the National Crop List used by the National FFA. Presentations feature detailed photos of each plant with additional photos of plant parts, as well as plant descriptions and vocabulary terms. The CD includes National and Illinois crop ID list sets; two practice sets without names; keys to practice sets; and two interactive quizzes that allow students to click on a crop image to identify the crop. A set of definitions are linked to terms in the presentations. Please notice that crops that are identified by seed only are not included on this CD. Use Crop Seed Samples (Z7003a) to practice crop seed identification.

MDS709-10
**Agronomic Crop Identification quiz Pack**
Price: $200.00

Designed for student drill and practice, this quiz pack is a set of 10 identical CD-ROMs. Part 1 of the CD is a practice set of crop images without names and part 2 is an interactive quizzing presentation, which allows the user to choose a crop image to answer an identification question. Provides a great tool...